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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,034	04/15/2004	Howard Hilton	10031555-1	7382
7590 06/20/2005			EXAMINER	
AGILENT TECHNOLOGIES, INC. Legal Department, DL429 Intellectual Property Administration P.O. Box 7599 Loveland, CO 80537-0599			BUI, BRYAN	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/825,034

Applicant(s)

HILTON, HOWARD

Examiner

Bryan Bui

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,8,11-15 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 2,6,9,10,16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-5, 7, 8, 11-15, 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Poimboeuf et al (US 6,067,411). Herein after Poimboeuf.

With respect to claim 1, Poimboeuf teaches adaptive frequency synthesizer with synchronization for facilitating analysis of a signal (figures 6, 9B) comprising identifying a period of the signal and adjusting a sample rate so that an integer number of sample intervals equals the period of the signal (abstract, column 5, lines 12-15); configuring a cyclic counter to reset according to the integer number (column 14, lines 20-25); capturing ensembles (recording at period of time) of data samples of the signal that are respectively defined by successive resets of the cyclic counter (column 14, lines 25-34). With respect to claims 3-5, 7, 8, 12-15, 19-20, Poimboeuf discloses the adjusting is performed using a programmable frequency synthesizer, and using a programmable rate digital re-sampler (column 14, lines 25-31); generating a trigger signal (pulse train drives a toggle select circuit) for the capturing in response to a reset of the cyclic counter, and initializing the cyclic counter using a trigger mechanism (toggle select circuit, column 14, lines 20-34); adjusting timing of the sample rate by a fraction of at the sample interval (column 5, lines 12-23).

With respect to claims 11 and 18, Poimboeuf discloses system for processing signal comprising an analog to digital converter for sampling the signal (column 17, lines 57-62); sample capturing (recording at period of time) of data samples of the signal such that integer number of the sample intervals equal the period (abstract, column 14, lines 25-34); cyclic counter logic that counts each captured sample and comprising a programmable modulus set to the integer number and wherein the sample capture circuitry is operable to output time aligned ensembles of captured samples that are defined by respective resets of the cyclic counter logic (abstract and column 14, lines 20-34).

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 11, 15, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hart et al (US 5,721,689).

With respect to claims 1, 11, 15, 18-19, Hart et al teaches a method for facilitating analysis of a signal having A/D converter for sampling the signal (figure 1 item 15, , figure 10, item 352) comprising: identifying a period of the signal (figure 3); adjusting a sample rate so that an integer number of sample intervals equals the period of the signal (column 4, lines 17-24); configuring a cyclic counter (counter in figure 4, steps 104 through 118) to reset according to the integer number (column 4, lines 26-

52); Hart et al do not disclose capturing ensembles (recording at the same time) of data samples of the signal that are respectively defined by successive resets of the cyclic counter. Hart et al, however, discloses the performance for tracking the generator frequency and adjusting sampling rate in sampling interval corresponding to the of counter operation in increment and resetting to obtain the angle data that specified by M cycles ( $M \times N$  samples) in column 4, lines 24-49). Thus, it would have been obvious to one of ordinary skill in the art to realize that Hart et al's operation is commonly indicates the capturing ensembles of data samples of the signal in order to provide the results for monitoring manner.

3. Claims 3-5, 7-8, 12-14, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hart et al (US 5,721,689) in view of Poimboeuf et al (US 6,067,411).

Hart et al discloses the features of the claimed invention, except mention the adjusting is performed using a programmable frequency synthesizer, and using a programmable rate digital re-sampler (column 14, lines 25-31); generating a trigger signal (pulse train drives a toggle select circuit) for the capturing in response to a reset of the cyclic counter, and initializing the cyclic counter using a trigger mechanism (toggle select circuit, column 14, lines 20-34); adjusting timing of the sample rate by a fraction of at the sample interval (column 5, lines 12-23). Poimboeuf et al discloses these limitations as follows column 14, lines 25-32; toggle select circuit, column 14, lines 20-34; and column 5, lines 12-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hart technique to include the

additional devices as taught by Poimboeuf et al to operate the processing signal more accurate.

***Allowable Subject Matter***

4. Claims 2, 6, 9, 10, 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In combination with other limitations recited in the base claims and intervening claims, the prior art fail to teach these additional limitations as recited..

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Bui whose telephone number is 571-272-2271. The examiner can normally be reached on M-Th from 7am-4pm, and Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BB

6/15/2005

**BRYAN BUI**  
**PRIMARY EXAMINER**

